INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: October 24, 2007

RE: Valmont Industries, Inc. / 039-23313-00237

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 03/23/06

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Indianapolis, Indiana 46204-2251
(317) 232-8603
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FEDERALLY ENFORCEABLE STATE OPERATING PERMIT RENEWAL
OFFICE OF AIR QUALITY

Valmont Industries, Inc.
58027 Charlotte Avenue
Elkhart, Indiana 46517

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Operation Permit No.: F039-23313-00237	
Issued by: *Original document signed by* Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: October 24, 2007 Expiration Date: October 24, 2012

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary a fabricated metal products facility which manufactures light poles.

Source Address:	58027 Charlotte Avenue, Elkhart, Indiana 46517
Mailing Address:	58027 Charlotte Avenue, Elkhart, Indiana 46517
General Source Phone Number:	(574) 295-6942
SIC Code:	3499
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) shot blaster, identified as EU-03, utilizing steel shot, with a maximum blast rate of 108 tons of steel shot per hour, exhausting through cartridge type dust collectors, identified as CD-03a and CD-03b, and vented internally.

(b) One (1) shot blaster, identified as EU-03B, utilizing steel shot, with a maximum blast rate of 4.5 tons of steel shot per hour, exhausting through cartridge type dust collectors, identified as CD-03c and CD-03d, and vented internally.

(c) Two (2) powder coating booths, identified as EU-04A and EU-04B; EU-04B is also known as the small parts line. Booth EU-04A has a maximum coating rate of 21.33 pounds per hour and is equipped with three (3) electrostatic applicators, only two of which can be used at any one time, exhausting through two (2) cartridge type dust collectors, identified as CD-04a and CD-04b, and venting back into the system as make up air. Booth EU-04B has a maximum coating rate of 10.67 pounds per hour and is equipped with one (1) electrostatic applicator, exhausting through one (1) cartridge type dust collector identified as CD-04c and venting back into the system as make up air.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

(a) One (1) natural gas-fired air make-up unit with a maximum rated capacity of 3.3 MMBtu/hr.

(b) One (1) natural gas-fired air make-up unit with a maximum rated capacity of 2.2 MMBtu/hr.

(c) One (1) natural gas-fired heating unit with a maximum rated capacity of 3.0 MMBtu/hr.

(d) Two (2) natural gas-fired bake ovens, each oven with a maximum rated capacity of 3.0 MMBtu/hr.

(e) Two (2) natural gas-fired air make-up air units, each with a maximum rated capacity of 9.0 MMBtu/hr.

(f) MIG welding stations.

(g) Gas metal arc welding.

(h) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(i) Paved and unpaved roads and parking lots with public access.

(j) Burn tables.

(k) Grinding and machining operations controlled with dust collectors, fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including one (1) buffing unit equipped with a dust collector, with a maximum flow rate of 1,400 acfm and a grain loading of less than 0.03 grains per cubic foot.

(l) Oxyacetylene cutting torches.

(m) Cutting of metal parts.

(n) Aluminum wipe down operation.

(o) Hot aluminum extrusion process with no significant emissions, consisting of a die cleaning process to clean metal dies (this process will use NaOH in the cleaning process and no regulated pollutants will be emitted).

(p) One chip collector associated with the new hot aluminum extrusion process with two (2) cold cut saws, and one (1) hot cut saw without a chip collector. [The hot aluminum extrusion process includes a chip collector from an aluminum saw. Particle size testing on the material collected by the chip collector indicates that 0.36% of the material is less than 100 microns and 0.13% of the material is less than 10 microns with a potential to emit of less than 5 tons per year for particulate both 100 and 10 microns in diameter classifying this as an insignificant activity.]

(q) One (1) plasma cutting table equipped with two (2) plasma torches, each torch having a maximum metal cutting rate of twenty (20) inches per minute and a maximum metal thickness of 1.25 inches, and two (2) oxyacetylene cutting torches, each torch having various cutting rates [worst-case emissions for each torch are at a maximum metal cutting rate of 2.20 inches per minute and a maximum metal thickness of 2.00 inches].

(r) One (1) natural gas-fired oven for heating metal parts with a maximum rated capacity of 4.0 MMBtu/hr.

(s) One (1) fluidized bed parts cleaning system, installed in 2006, used to clean metal hooks layered with powder coatings. Sand in the bottom of the system is brought to a bubbling state by injecting air. The system is equipped with a natural gas-fired pilot burner, with a maximum rated capacity of 0.277 MMBtu/hr, located above the surface of the bubbling sand. Natural-gas is injected into the system and is ignited by the pilot burner and then the flame spreads over the sand and heats the sand. The metal parts are lowered into the heated sand and gases rising from the fluidized bed are combusted in a post-combustion chamber. The fluidized bed is equipped with a pneumatically operated cover. The system is also equipped with a cyclone fan to separate entrained dust particles or sand from the exhaust gases. VOC and HAP emissions from this operation are negligible because the system is used to clean metal hooks layered with powder coatings, which have negligible VOC/HAP contents.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, F039-23313-00237, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.12 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

Northern Regional Office Telephone Number: 574-245-4870
Northern Regional Office Facsimile Number: 574-245-4877

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to F039-23313-00237 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8][326 IAC 2-2]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.15 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emission Unit Description:

(a) One (1) shot blaster, identified as EU-03, utilizing steel shot, with a maximum blast rate of 108 tons of steel shot per hour, exhausting through cartridge type dust collectors, identified as CD-03a and CD-03b, and vented internally.

(b) One (1) shot blaster, identified as EU-03B, utilizing steel shot, with a maximum blast rate of 4.5 tons of steel shot per hour, exhausting through cartridge type dust collectors, identified as CD-03c and CD-03d, and vented internally.

(c) Two (2) powder coating booths, identified as EU-04A and EU-04B; EU-04B is also known as the small parts line. Booth EU-04A has a maximum coating rate of 21.33 pounds per hour and is equipped with three (3) electrostatic applicators, only two of which can be used at any one time, exhausting through two (2) cartridge type dust collectors, identified as CD-04a and CD-04b, and venting back into the system as make up air. Booth EU-04B has a maximum coating rate of 10.67 pounds per hour and is equipped with one (1) electrostatic applicator, exhausting through one (1) cartridge type dust collector identified as CD-04c and venting back into the system as make up air.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate (PM) [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate (PM) emissions from the shot blasting unit (EU-03) shall not exceed 52.05 pounds per hour when operating at a maximum throughput rate of 108 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

The use of the cartridge type dust collectors, identified as CD-03a and CD-03b, are necessary to comply with the emission limit above.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate (PM) emissions from the shot blasting unit (EU-03B) shall not exceed 11.23 pounds per hour when operating at a maximum throughput rate of 4.5 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.2 Particulate (PM) [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate (PM) emissions from the powder coating booths (EU-04A and EU-04B) shall be controlled by a dry particulate filter, water wash, or equivalent control device. The Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.3 PSD Minor Limits (PM) [326 IAC 2-2]

The emissions of PM from each of the two (2) shot blaster units, identified as EU-03 and EU-03B, and each of the two (2) powder coating booths, identified as EU-04A and EU-04B, shall not exceed the following limits:

Emission Unit	PM Limit (lbs/hr)
Shot Blasting Unit (EU-03)	8.64
Shot Blasting Unit (EU-03B)	0.36
Powder Coating Booth (EU-04A)	0.11
Powder Coating Booth (EU-04B)	0.053

Compliance with these limits, combined with the PM emissions from all other emission units at the source, shall limit the source-wide potential to emit of PM to less than 250 tons per year and shall render 326 IAC 2-2 (PSD) not applicable.

D.1.4 FESOP Limits (PM-10) [326 IAC 2-8-4][326 IAC 2-2]

The emissions of PM-10 from each of the two (2) shot blaster units, identified as EU-03 and EU-03B, and each of the two (2) powder coating booths, identified as EU-04A and EU-04B, shall not exceed the following limits:

Emission Unit	PM-10 Limit (lbs/hr)
Shot Blasting Unit (EU-03)	8.64
Shot Blasting Unit (EU-03B)	0.36
Powder Coating Booth (EU-04A)	0.11
Powder Coating Booth (EU-04B)	0.053

Compliance with these limits, combined with the PM-10 emissions from all other emission units at the source, shall limit the source-wide potential to emit of PM-10 to less than 100 tons per year, shall satisfy the requirements of 326 IAC 2-8-4 (FESOP), and render 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) not applicable.

D.1.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the two (2) shot blaster units (EU-03 and EU-03B) and the two (2) powder coating booths (EU-04A and EU-04B) and any control devices.

Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

D.1.6 Particulate Control (PM and PM-10)

(a) In order to comply with Conditions D.1.1(a), D.1.3, and D.1.4, the cartridge type dust collectors (CD-03a and CD-03b) for particulate control shall be in operation at all times that the shot blasting unit, identified as EU-03, is in operation.

(b) In order to comply with D.1.1(b), D.1.3, and D.1.4, the cartridge type dust collectors (CD-03c and CD-03d) shall be in operation at all times that the shot blasting unit, identified as EU-03B, is in operation.

(c) In order to comply with D.1.2, D.1.3, and D.1.4, the cartridge type dust collectors (CD-04a and CD-04b) shall be in operation at all times that the powder coating booth, identified as EU-04A, is in operation.

(d) In order to comply with D.1.2, D.1.3, and D.1.4, the cartridge type dust collector (CD-04c) shall be in operation at all times that the powder coating booth, identified as EU-04B, is in operation.

D.1.7 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the cartridge type dust collectors CD-03a and CD-03b used in conjunction with the shot blasting unit (EU-03) at least once per day when the shot blasting unit is in operation. When for any one reading, the pressure drop across the cartridge type dust collector CD-03a is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test and the pressure drop across the cartridge type dust collector CD-03b is outside the normal range of 0.5 and 2.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(b) The Permittee shall record the pressure drop across the cartridge type dust collectors CD-03c and CD-03d used in conjunction with the shot blasting unit (EU-03B) at least once per day when the shot blasting unit is in operation. When for any one reading, the pressure drop across the cartridge type dust collector CD-03c is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test and the pressure drop across the cartridge type dust collector CD-03d is outside the normal range of 0.5 and 2.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(c) The Permittee shall record the pressure drop across the cartridge type dust collectors CD-04a and CD-04b used in conjunction with the powder coating booth (EU-04A) at least once per day when the powder coating booth is in operation. When for any one reading, the pressure drop across the cartridge type dust collector CD-04a is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test and the pressure drop across the cartridge type dust collector CD-04b is outside the normal range of 0.5 and 2.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(d) The Permittee shall record the pressure drop across the cartridge type dust collector CD-04c used in conjunction with the powder coating booth (EU-04B) at least once per day when the powder coating booth is in operation. When for any one reading, the pressure drop across the cartridge type dust collector CD-04c is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Broken or Failed Cartridge Filter Detection

(a) In the event that a cartridge filter failure is observed in a multi-compartment unit, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(a) For a single compartment cartridge filter controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment cartridge filter controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Cartridge filter failure can be indicated by a significant drop in the filter's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

D.1.9 Record Keeping Requirements

(a) To document compliance with Condition D.1.7, the Permittee shall maintain a daily record of the pressure drop across the cartridge type dust collectors controlling EU-03, EU-03B, EU-04A, and EU-04B. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Valmont Industries, Inc.
Source Address: 58027 Charlotte Avenue, Elkhart, Indiana 46517
Mailing Address: 58027 Charlotte Avenue, Elkhart, Indiana 46517
FESOP Permit No.: F039-23313-00237

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify)_____

☐ Report (specify)_____

☐ Notification (specify)_____

☐ Affidavit (specify)_____

☐ Other (specify)_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Valmont Industries, Inc.
Source Address: 58027 Charlotte Avenue, Elkhart, Indiana 46517
Mailing Address: 58027 Charlotte Avenue, Elkhart, Indiana 46517
FESOP Permit No.: F039-23313-00237

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Valmont Industries, Inc.
Source Address: 58027 Charlotte Avenue, Elkhart, Indiana 46517
Mailing Address: 58027 Charlotte Avenue, Elkhart, Indiana 46517
FESOP Permit No.: F039-23313-00237

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked ANo deviations occurred this reporting period@.

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Renewal

Source Background and Description

Source Name:	Valmont Industries, Inc.
Source Location:	58027 Charlotte Avenue, Elkhart, IN 46517
County:	Elkhart
SIC Code:	3499
Permit Renewal No.:	F039-23313-00237
Permit Reviewer:	Tanya White/EVP

On September 19, 2007, the Office of Air Quality (OAQ) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that Valmont Industries, Inc. had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to continue to operate a fabricated metal products facility which manufactures light poles. The notice also stated that OAQ proposed to issue a FESOP Renewal for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP Renewal should be issued as proposed.

On September 21, 2007, Valmont Industries, Inc. submitted a request to IDEM, OAQ to add two (2) oxy-fuel torches to its existing plasma cutting table. Pursuant to 326 IAC 2-7-1(21)(G)(vi)(EE), the two (2) oxy-fuel torches are considered insignificant activities and will be incorporated into FESOP Renewal No.: F039-23313-00237. IDEM, OAQ has revised permit Condition A.3 as follows to include the two (2) oxy-fuel torches (additions in bold, deletions in ~~strikeout~~): [Note: No other changes were required to the permit since these torches do not have any specifically applicable requirements.]

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

...

(q) **One (1)** ~~Plasma~~ **plasma** cutting table **equipped with two (2) plasma torches, each torch having a maximum metal cutting rate of twenty (20) inches per minute and a maximum metal thickness of 1.25 inches, and two (2) oxyacetylene cutting torches, each torch having various cutting rates [worst-case emissions for each torch are at a maximum metal cutting rate of 2.20 inches per minute and a maximum metal thickness of 2.00 inches]**.

...

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit Renewal

Source Background and Description

Source Name:	Valmont Industries, Inc.
Source Location:	58027 Charlotte Avenue, Elkhart, IN 46517
County:	Elkhart
SIC Code:	3499
Permit Renewal No.:	F039-23313-00237
Permit Reviewer:	Tanya White/EVP

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Valmont Industries, Inc. relating to the operation of a fabricated metal products facility which manufactures light poles.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and/or control equipment:

(a) One (1) shot blaster, identified as EU-03, utilizing steel shot, with a maximum blast rate of 108 tons of steel shot per hour, exhausting through cartridge type dust collectors, identified as CD-03a and CD-03b, and vented internally.

(b) One (1) shot blaster, identified as EU-03B, utilizing steel shot, with a maximum blast rate of 4.5 tons of steel shot per hour, exhausting through cartridge type dust collectors, identified as CD-03c and CD-03d, and vented internally.

(c) Two (2) powder coating booths, identified as EU-04A and EU-04B; EU-04B is also known as the small parts line. Booth EU-04A has a maximum coating rate of 21.33 pounds per hour and is equipped with three (3) electrostatic applicators, only two of which can be used at any one time, exhausting through two (2) cartridge type dust collectors, identified as CD-04a and CD-04b, and venting back into the system as make up air. Booth EU-04B has a maximum coating rate of 10.67 pounds per hour and is equipped with one (1) electrostatic applicator, exhausting through one (1) cartridge type dust collector identified as CD-04c and venting back into the system as make up air.

Emission Units and Pollution Control Equipment Removed From the Source

The following emission unit and control equipment have been removed from the source:

(a) One (1) powder coating booth, identified as EU-05, with a maximum coating rate of 22.53 pounds per hour, exhausting through two (2) cartridge type dust collectors identified as CD-05a and CD-05b and venting back into the building.

Insignificant Activities

The source consists of the following insignificant activities:

(a) One (1) natural gas-fired air make-up unit with a maximum rated capacity of 3.3 MMBtu/hr.

(b) One (1) natural gas-fired air make-up unit with a maximum rated capacity of 2.2 MMBtu/hr.

(c) One (1) natural gas-fired heating unit with a maximum rated capacity of 3.0 MMBtu/hr.

(d) Two (2) natural gas-fired bake ovens, each oven with a maximum rated capacity of 3.0 MMBtu/hr.

(e) Two (2) natural gas-fired air make-up air units, each with a maximum rated capacity of 9.0 MMBtu/hr.

(f) MIG welding stations.

(g) Gas metal arc welding.

(h) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(i) Paved and unpaved roads and parking lots with public access.

(j) Burn tables.

(k) Grinding and machining operations controlled with dust collectors, fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including one (1) buffing unit equipped with a dust collector, with a maximum flow rate of 1,400 acfm and a grain loading of less than 0.03 grains per cubic foot.

(l) Oxyacetylene cutting torches.

(m) Cutting of metal parts.

(n) Aluminum wipe down operation.

(o) Hot aluminum extrusion process with no significant emissions, consisting of a die cleaning process to clean metal dies (this process will use NaOH in the cleaning process and no regulated pollutants will be emitted).

(p) One chip collector associated with the new hot aluminum extrusion process with two (2) cold cut saws, and one (1) hot cut saw without a chip collector. [The hot aluminum extrusion process includes a chip collector from an aluminum saw. Particle size testing on the material collected by the chip collector indicates that 0.36% of the material is less than 100 microns and 0.13% of the material is less than 10 microns with a potential to emit of less than 5 tons per year for particulate both 100 and 10 microns in diameter classifying this as an insignificant activity.]

(q) Plasma cutting table.

(r) One (1) natural gas-fired oven for heating metal parts with a maximum rated capacity of 4.0 MMBtu/hr.

(s) One (1) fluidized bed parts cleaning system, installed in 2006, used to clean metal hooks layered with powder coatings. Sand in the bottom of the system is brought to a bubbling state by injecting air. The system is equipped with a natural gas-fired pilot burner, with a maximum rated capacity of 0.277 MMBtu/hr, located above the surface of the bubbling sand. Natural-gas is injected into the system and is ignited by the pilot burner and then the flame spreads over the sand and heats the sand. The metal parts are lowered into the heated sand and gases rising from the fluidized bed are combusted in a post-combustion chamber. The fluidized bed is equipped with a pneumatically operated cover. The system is also equipped with a cyclone fan to separate entrained dust particles or sand from the exhaust gases. VOC and HAP emissions from this operation are negligible because the system is used to clean metal hooks layered with powder coatings, which have negligible VOC/HAP contents.

Existing Approvals

Since the issuance of the FESOP Renewal No.: F039-14186-00237 on April 3, 2002, the source has also constructed or has been operating under the following approvals:

(a) First Administrative Amendment No.: 039-6924-00237 issued on April 3, 2003;

(b) Second Administrative Amendment No.: 039-17645-00237 issued on November 13, 2003;

(c) First Significant Permit Revision No.: 039-20117-00237 issued on June 2, 2005; and

(d) Third Administrative Amendment No.: 039-22626-00237 issued on February 17, 2006.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Note: Permitting requirements related to powder coating booth EU-05 have not been incorporated into the FESOP renewal since this emission unit and its control equipment have been removed from the source.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 6).

County Attainment Status

The source is located in Elkhart County

Pollutant	Status
PM-10	Attainment
PM2.5	Attainment
SO_2	Attainment
NOx	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

(a) Elkhart County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM-10 emissions as a surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.

(b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. On September 6, 2007, the Indiana Air Pollution Control Board adopted an emergency rule for the redesignation of several counties, including Allen, Elkhart, Clark, Floyd, LaPorte, and St. Joseph, to attainment for the 8-hour ozone standard. The source is located in Elkhart County; therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration, 326 IAC 2-2.

(c) Elkhart County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

(e) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, determined during this review.

Pollutant	Potential Emissions (tons/year)
PM	Greater than 250
PM-10	Greater than 100
SO_2	Less than 100
VOC	Less than 100
CO	Less than 100
NO_x	Less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAPs	Potential Emissions (tons/year)
Xylene	Less than 10
MIBK	Less than 10
Ethyl Benzene	Less than 10
1, 6-Hexamethylene diisocyanate	Less than 10
Hexane	Less than 10
Lead	Less than 10
Total HAPs	Less than 25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM-10 is greater than 100 tons per year. The source is subject to the provisions of 326 IAC 2-7. However, the source has agreed to limit their PM-10 emissions to less than Title V levels, therefore the source will be issued a FESOP.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM2.5	0.0
PM-10	0.0
SO_2	Not Reported
VOC	Not Reported
CO	Not Reported
NO_x	Not Reported
HAPs	Not Reported

Potential to Emit After Issuance

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential To Emit (tons/year)							
Process/Emission Unit	**PM**	**PM-10**	**SO_2**	**VOC**	**CO**	**NO_x**	**Single HAP**	**Total HAPs**
Shot Blasting (EU-03)	37.84[(2)]	32.55[(1)]	-	-	-	-	-	-
Shot Blasting (EU-03B)	1.58[(2)]	1.36[(1)]	-	-	-	-	-	-
Powder Coating (EU-04A)	0.47[(2)]	0.47[(1)]	-	-	-	-	-	-
Powder Coating (EU-04B)	0.23[(2)]	0.23[(1)]	-	-	-	-	-	-
Natural Gas Combustion Units	0.31	1.25	0.10	0.90	13.81	16.44	0.30 (Hexane)	0.31
Welding and Thermal Cutting	4.14	4.14	-	-	-	-	0.91 (Manganese)	0.92
Total Emissions	**44.57**	**39.99**	**0.10**	**0.90**	**13.81**	**16.44**	**0.91 (Manganese)**	**1.23**

(1) Emissions of PM-10 have been limited in order to satisfy the requirements of 326 IAC 2-8-4 (FESOP) and to render 326 IAC 2-7 (Part 70) and 326 IAC 2-2 (PSD) not applicable.

(2) PM emissions are limited in order to render 326 IAC 2-2 (PSD) not applicable and to comply with 326 IAC 6-3-2 or 326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes).

(a) This existing stationary source is not major for PSD (326 IAC 2-2) purposes because the emissions of PM and PM-10 are limited to less than two hundred fifty (250) tons per year and the potential to emit of all other criteria pollutants are less than two hundred fifty (250) tons per year, and it is not one of the twenty eight (28) listed source categories.

Federal Rule Applicability

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

As a FESOP source, this source has accepted federally enforceable limits such that the requirements of 326 IAC 2-7 (Part 70) do not apply. Therefore, the requirements of 40 CFR 64 (Compliance Assurance Monitoring) are not included in this permit.

(b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit for this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-8-4 (FESOP)
This source is not one of the twenty eight (28) listed source categories under 326 IAC 2-2-1(gg)(1). The permit contains limits to restrict the source-wide emissions of PM-10 to less than 100 tons per year. Additionally, the permit contains limits to restrict the source-wide emissions of PM to less than 250 tons per year. The potential to emit of VOC, NOx, SO_2, and CO are each less than 100 tons per year. In order to make the requirements of 326 IAC 2-2 (PSD) not applicable and to satisfy the requirements of 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following emission limitations:

(a) The particulate matter (PM and PM-10) emissions from each of the two (2) shot blasting units, identified as EU-03 and EU-03B, and each of the two (2) powder coating booths, identified as EU-04A and EU-04B, shall not exceed the following limits:

Emission Unit	PM/PM-10 Limit (lbs/hr)	Equivalent Limit (tons/yr)
Shot Blasting Unit (EU-03)	8.64	37.84
Shot Blasting Unit (EU-03B)	0.36	1.58
Powder Coating Booth (EU-04A)	0.11	0.47
Powder Coating Booth (EU-04B)	0.053	0.23

Compliance with these limits, combined with the PM and PM-10 emissions from all other emission units at the source, shall limit the source-wide potential to emit of PM and PM-10 to less than 250 tons per year and 100 tons per year, respectively, shall satisfy the requirements of 326 IAC 2-8-4 (FESOP), and render 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) not applicable.

326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this rule applies to sources that are required to have an operating permit under 326 IAC 2-7 (Part 70), sources located in Lake, LaPorte, or Porter Counties that emit greater than twenty-five (25) tons per year of VOC or NOx, and sources that emit greater than five (5) tons per year of lead.

Valmont Industries, Inc. is located in Elkhart County and this source is not required to have an operating permit under 326 IAC 2-7 (Part 70) since the FESOP restricts emissions below Part 70 major source thresholds. Additionally, this source has a potential to emit of less than five (5) tons per year of lead. Therefore, the requirements of 326 IAC 2-6 do not apply.

326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of source will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, the requirements of 326 IAC 2-4.1 do not apply.

State Rule Applicability – Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate (PM) emissions from the shot blasting unit (EU-03) shall not exceed 52.05 pounds per hour when operating at a maximum throughput rate of 108 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

In this case,
P = 108 tons per hour, and
E = 52.05 pounds of PM per hour

The use of the cartridge type dust collectors, identified as CD-03a and CD-03b, are necessary to comply with the emission limit above.

(b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate (PM) emissions from the shot blasting unit (EU-03B) shall not exceed 11.23 pounds per hour when operating at a maximum throughput rate of 4.5 tons per hour.

The pounds per hour limitation was calculated using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

In this case,
P = 4.5 tons per hour, and
E = 11.23 pounds of PM per hour

The use of the cartridge type dust collectors, identified as CD-03c and CD-03d, are necessary to comply with the emission limit above.

(c) Pursuant to 326 IAC 6-3-1(b)(9), the welding operations (eight welding stations) are exempt from the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) because the welding operations consume less than six hundred twenty five (625) pounds of rod or wire per day.

(d) Pursuant to 326 IAC 6-3-1(b)(10), the torch cutting operations are exempt from the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) because the torch cutting operations cut less than three thousand four hundred (3,400) inches per hour of stock one (1) inch thickness or less.

326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2(d), particulate (PM) emissions from the powder coating booths (EU-04A and EU-04B) shall be controlled by a dry particulate filter, water wash, or equivalent control device. The Permittee shall operate the control device in accordance with manufacturer's specifications.

The source utilizes cartridge type dust collectors CD-04a and CD-04b for powder coating booth EU-04A and cartridge type dust collector CD-04c for powder coating booth EU-04B to comply with 326 IAC 6-3-2(d).

326 IAC 8-2-9 (Miscellaneous Metal Coating)
Pursuant to 326 IAC 8-2-1(a)(2), the requirements of 326 IAC 8-2-9 apply to facilities as described below which were constructed after November 1, 1980, located in any county, and which have potential emissions of 25 tons or greater per year of VOC. Pursuant to 326 IAC 8-2-1(a)(4), the requirements of 326 IAC 8-2-9 also apply to facilities as described below which were constructed after July 1, 1990, located in any county, and which have actual emissions of greater than 15 pounds of VOC per day before add-on controls.

The requirements of 326 IAC 8-2-9 apply to the surface coating of the following:

(1) Large and small farm machinery.
(2) Small household appliances.
(3) Office equipment.
(4) Industrial machinery.
(5) Any other industrial category which coats metal parts or products under the Standard Industrial Classification Code of major groups #33, #34, #35, #36, #37, #38, and #39.

The requirements of 329 IAC 8-2-9 do not apply to the powder coating booths EU-04A and EU-04B, used to apply coating to metal parts, which were each constructed after November 1, 1980, because the emissions of VOCs from these booths are negligible and less than 15 pounds per day. Therefore the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) are not included in the permit.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

(a) The shot blasting units EU-03 and EU-03B have applicable compliance determination conditions as specified below:

(1) The Permittee shall record the pressure drop across the cartridge type dust collectors CD-03a and CD-03b used in conjunction with the shot blasting unit (EU-03) at least once per day when the shot blasting unit is in operation. When for any one reading, the pressure drop across the cartridge type dust collector CD-03a is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test and the pressure drop across the cartridge type dust collector CD-03b is outside the normal range of 0.5 and 2.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(2) The Permittee shall record the pressure drop across the cartridge type dust collectors CD-03c and CD-03d used in conjunction with the shot blasting unit (EU-03B) at least once per day when the shot blasting unit is in operation. When for any one reading, the pressure drop across the cartridge type dust collector CD-03c is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test and the pressure drop across the cartridge type dust collector CD-03d is outside the normal range of 0.5 and 2.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(3) In the event that a cartridge filter failure is observed in a multi-compartment unit, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

For a single compartment cartridge filter controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

For a single compartment cartridge filter controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Cartridge filter failure can be indicated by a significant drop in the filter's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

These monitoring conditions are necessary because the cartridge type dust collectors CD-03a and CD-03b for shot blasting unit EU-03 and the cartridge type dust collectors CD-03c and CD-03d for shot blasting unit EU-03B must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes) and 326 IAC 2-8-4 (FESOP) and to render 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) not applicable.

(b) The powder coating operations EU-04A and EU-04B have applicable compliance determination conditions as specified below:

(1) The Permittee shall record the pressure drop across the cartridge type dust collectors CD-04a and CD-04b used in conjunction with the powder coating booth (EU-04A) at least once day when the powder coating booth is in operation. When for any one reading, the pressure drop across the cartridge type dust collector CD-04a is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test and the pressure drop across the cartridge type dust collector CD-04b is outside the normal range of 0.5 and 2.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(2) The Permittee shall record the pressure drop across the cartridge type dust collector CD-04c used in conjunction with the powder coating booth (EU-04B) at least once per day when the powder coating booth is in operation. When for any one reading, the pressure drop across the cartridge type dust collector CD-04c is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(3) In the event that a cartridge filter failure is observed in a multi-compartment unit, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

For a single compartment cartridge filter controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

For a single compartment cartridge filter controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Cartridge filter failure can be indicated by a significant drop in the filter's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

These monitoring conditions are necessary because the cartridge type dust collectors CD-04a and CD-04b for powder coating booth EU-04A and the cartridge type dust collector CD-04c for powder coating booth EU-04B must operate properly to ensure compliance with 326 IAC 6-3-2(d) (Particulate Emissions Limitations for Manufacturing Processes) and 326 IAC 2-8-4 (FESOP) and to render 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) not applicable.

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 3, 2006.

Conclusion

The operation of this fabricated metal products facility which manufactures light poles shall be subject to the conditions of the attached FESOP Renewal No.: F039-23313-00237.

Appendix A: Emission Calculations

Company Name: Valmont Industries, Inc.
Address: 58027 Charlotte Avenue, Elkhart, IN 46517
Permit No.: F039-23313-00237
Reviewer: TW/EVP
Date: 08/10/07

Uncontrolled Potential Emissions (tons/year)

	Emissions Generating Activity				
Pollutant	Shot Blasting Units	Powder Coating	Natural Gas Combustion	Welding and Thermal Cutting	**Total**
PM	3,942.00	70.08	0.31	4.14	4,016.53
PM-10	3,390.12	70.08	1.25	4.14	3,465.59
SO_2	0.00	0.00	0.10	0.00	0.10
NOx	0.00	0.00	16.44	0.00	16.44
VOC	0.00	0.00	0.90	0.00	0.90
CO	0.00	0.00	13.81	0.00	13.81
total HAPs	0.00	0.00	0.31	0.92	1.23
worst case single HAP	0.00	0.00	0.30	0.91	0.91
			Hexane	**Manganese**	**Manganese**

Total emissions based on rated capacity at 8,760 hours/year.

Controlled/Limited Potential Emissions (tons/year)

	Emissions Generating Activity				
Pollutant	Shot Blasting Units	Powder Coating	Natural Gas Combustion	Welding and Thermal Cutting	**Total**
PM	39.42	0.70	0.31	4.14	44.57
PM-10	33.90	0.70	1.25	4.14	39.99
SO_2	0.00	0.00	0.10	0.00	0.10
NOx	0.00	0.00	16.44	0.00	16.44
VOC	0.00	0.00	0.90	0.00	0.90
CO	0.00	0.00	13.81	0.00	13.81
total HAPs	0.00	0.00	0.31	0.92	1.23
worst case single HAP	0.00	0.00	0.30	0.91	0.91
			Hexane	**Manganese**	**Manganese**

Total emissions based on rated capacity at 8,760 hours/year, after limits/controls.

Appendix A: Emission Calculations
Powder Coating Booths

Company Name: Valmont Industries, Inc.
Address: 58027 Charlotte Avenue, Elkhart, IN 46517
Permit No.: F039-23313-00237
Reviewer: TW/EVP
Date: 08/10/07

Potential to Emit (tons/yr) Before Controls:

Process	Material Usage (lbs/hr)	Uncontrolled PM/PM-10 Emissions (lbs/hr)	Uncontrolled PM/PM-10 Emissions (tons/yr)	Transfer Efficiency (%)
Powder Coating (EU-04A)	21.33	10.67	46.71	50%
Powder Coating (EU-04B)	10.67	5.34	23.37	50%

Potential to Emit (tons/yr) After Controls:

Process	Material Usage (lbs/hr)	Control Efficiency	Controlled PM/PM-10 Emissions (lbs/hr)	Controlled PM/PM-10 Emissions (tons/yr)	Transfer Efficiency (%)
Powder Coating (EU-04A)	21.33	99.00%	0.11	0.47	50%
Powder Coating (EU-04B)	10.67	99.00%	0.05	0.23	50%

Methodology
Assumes a transfer efficiency of 50% as a worst-case scenario.
Controlled PM/PM-10 Emissions (ton/yr) = Maximum Usage (lbs/hr) x (1- Transfer Efficiency %) x 8760 hrs/yr x 1 ton/2,000 lbs x (1 - Control Efficiency %)
Uncontrolled PM/PM-10 Emissions (ton/yr) = Maximum Usage (lbs/hr) x (1- Transfer Efficiency %) x 8760 hrs/yr x 1 ton/2,000 lbs

Appendix A: Emission Calculations
Shot Blasting Operations

Company Name: Valmont Industries, Inc.
Address: 58027 Charlotte Avenue, Elkhart, IN 46517
Permit No.: F039-23313-00237
Reviewer: TW/EVP
Date: 08/10/07

Abrasive	Emission Factors for Abrasives	
	lb PM / lb abrasive	lb PM-10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	

Emission Unit	Maximum Throughput (lbs/hr)	Type of Shot	Uncontrolled PM Emissions (tons/yr)	Uncontrolled PM-10 Emissions (tons/yr)	Control Efficiency (%)	Controlled PM Emissions (tons/yr)	Controlled PM-10 Emissions (tons/yr)
Shot Blasting (EU-03)	216,000	Steel	3,784.32	3,254.52	99%	37.84	32.55
Shot Blasting (EU-03B)	9,000	Steel	157.68	135.60	99%	1.58	1.36

METHODOLOGY

Uncontrolled PM Emissions (tons/yr) = Maximum Throughput (lbs/hr) x Emission Factor (lb PM/lb abrasive) x 8,760 hrs/yr x 1 ton/2,000 lbs
Uncontrolled PM-10 Emissions (tons/yr) = Maximum Throughput (lbs/hr) x Emission Factor (0.86 lb PM-10/lb PM) x 8,760 hrs/yr x 1 ton/2,000 lbs
Controlled PM/PM-10 Emissions (tons/yr) = Uncontrolled PM/PM-10 Emissions (tons/yr) x (1- Control Efficiency %)
Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MMBtu/hr <100

Company Name: Valmont Industries, Inc.
Address: 58027 Charlotte Avenue, Elkhart, IN 46517
Permit No.: F039-23313-00237
Reviewer: TW/EVP
Date: 08/10/07

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr	
3.30	Air make-up unit	28.91	
2.20	Air make-up unit	19.27	
9.00	Air make-up unit	78.84	
9.00	Air make-up unit	78.84	
6.00	Bake ovens	52.56	
3.75	Heating unit	32.85	
4.00	Heating unit	35.04	
0.28	Parts cleaner burner	2.43	
37.53	**Total**	**328.74**	**Total**

	Pollutant					
	PM*	PM-10*	SO_2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emissions in tons/yr	0.31	1.25	0.10	16.44	0.90	13.81

*PM emission factor is filterable PM only. PM-10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Potential Emissions (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
See next page for HAP emission calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MMBtu/hr <100
HAP Emissions

Company Name: Valmont Industries, Inc.
Address: 58027 Charlotte Avenue, Elkhart, IN 46517
Permit No.: F039-23313-00237
Reviewer: TW/EVP
Date: 08/10/07

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMCF	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03
Potential Emissions in tons/yr	3.45E-04	1.97E-04	1.23E-02	2.96E-01	5.59E-04

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMCF	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03
Potential Emissions in tons/yr	8.22E-05	1.81E-04	2.30E-04	6.25E-05	3.45E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAP emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Welding and Thermal Cutting

Company Name: Valmont Industries, Inc.
Address: 58027 Charlotte Avenue, Elkhart, IN 46517
Permit No.: F039-23313-00237
Reviewer: TW/EVP
Date: 08/10/07

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPs (lbs/hr)
WELDING				PM = PM-10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Metal Inert Gas (MIG)(carbon steel)	8	8.2		0.0052	0.00318	0.00001	0.00001	0.341	0.209	0.001	0.001	0.210
	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
FLAME CUTTING				PM = PM-10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	2	1	31	0.1622	0.0005	0.0001	0.0003	0.603	0.000	0.000	0.000	0.0002
EMISSION TOTALS												
Potential Emissions lbs/hr								0.945	0.209	0.001	0.001	0.210
Potential Emissions lbs/day								22.668	5.010	0.016	0.016	5.042
Potential Emissions tons/year								4.137	0.914	0.003	0.003	0.920

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.
Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lb
Emission Factors are from AP-42, Chapter 12.19, Tables 12.9-1 and 12.9-2.